where diagnosis is certain should active purging be used by the nurse or family without the physician's order, and cold applications should be used rather than hot. All food or water should be withheld except as the physician advises.

A PLEA FOR THE TRAINED NURSE AS AN ANÆSTHETIST *

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Anæsthesia is one line of surgical work to which very little attention has been given in the medical colleges, hospitals, or the profession in outside practice, the administration of anæsthetics being looked upon as such a minor or unimportant part that it could be done by anyone available. This is especially true in outside practice, and in most of the hospitals throughout the country.

Most of us know that the average practising physician or interne has no training in this line of work; and even if he has had training of a few months as hospital interne, he is apt to be out of practice, and probably has not given an anæsthetic for months, or even years.

When an interne or practising physician is giving an anæsthetic his mind is more apt to be taken up with the field of operation than with his part of the work. For this very reason, if no other, a specially-trained nurse makes the best anæsthetist.

The medical profession is slowly but surely being convinced that this part of surgical work has not received the attention its importance warrants.

The method used by me is the ether "drop method," which has been used so successfully for the past ten years at St. Mary's Hospital, Rochester, Minn.; it having been my privilege and pleasure to make a most careful observation of this method at this great surgical clinic.

The inhaler used is the improved Esmarch, covered with two thicknesses of stockinet, ether being dropped on slowly until the patient's face becomes flushed, then a few layers of surgeon's gauze are folded around the mask, and the ether is given a little faster until the patient is surgically etherized. I then remove some of the gauze and continue

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to drop on the ether, but very slowly and with a small drop, only sufficient to keep the patient in this condition, very little being needed in most cases. The type of operation and operator has a great deal to do with the amount of anæsthetic required. Respiration and circulation, as shown by color, rather than pulse, are the main indices as to the patient's condition, though in patients who have lost a good deal of blood and who are pale to start with, the pulse may be taken also.

To prevent infection being conveyed from the mouth and air-passages of one patient to the patient following, the hands of the anæsthetist should be washed between operations, the frame of the mask sterilized, a fresh piece of stockinet placed upon it, and fresh sterile gauze for folding around the mask. These pieces of stockinet and gauze can be washed, sterilized, and used again.

The anæsthetist should be quick to recognize the patient's temperament when he enters the operating room. Considerable tact must be exercised at times to gain the patient's confidence, which is very necessary in successful anæsthesia. After gaining his confidence, suggestion is a powerful aid. The patient is far more responsive and willing to submit to anæsthesia if assured by the anæsthetist that the surgeon will not be allowed to start the operation until he is entirely unconscious.

After the patient is placed on the operating table, artificial teeth should be removed, hands should be fastened loosely across the chest with a wide gauze bandage, and a pad of moistened cotton placed over the eyes to prevent irritation from the anæsthetic.

See that the patient's head is properly elevated. His shoulders should rest upon the table, his head be supported by one or two soft pillows, according to the depth of chest. There should be no flexion or extension. Very obese patients may require several pillows, which can be successively removed as anæsthesia deepens, till the dorsal posture is reached.

It is a great mistake to always lower the head, as is recommended in so many text-books. There is absolutely no danger in elevating the head as much as is comfortable for the patient in giving ether. Make the patient comfortable, in short, do everything to enable the patient to breathe easily and naturally. He should be told how the anæsthetic will affect him and he will then be prepared for what is coming, and will not be alarmed. It is an excellent practice to divert his attention by talking quietly to him while administering the anæsthetic, and less of it will be necessary to produce the requisite degree of relaxation.

One of the greatest aids to surgical anæsthesia is the preparation of the patient while being anæsthetized, thereby diverting him, hastening

anæsthesia, and saving time. After the patient's jaw becomes relaxed, turn the head to one side, and hold the jaw up and forward.

While the best authorities say there is no single positive sign of surgical anæsthesia, yet there are many conditions that aid us, such as deep respiration, relaxation of muscles, etc., all of which, taken together, convince the anæsthetist the patient is ready, so that a mistake is rarely made. Give the patient plenty of fresh air, and he will do much better than if crowded. Should respiration become embarrassed, raise the jaw up and press it forward, withdrawing the anæsthetic.

I never use tongue forceps, but rather, when it becomes necessary, catch the tongue with a piece of gauze, pulling it out, somewhat to one side. By giving plenty of air when needed, the patient will not become cyanosed, and there will be little need for the many stimulants so often resorted to in operating rooms.

If stomach cases are thoroughly prepared by lavage, and if morphine gr. 1/6 be given thirty minutes before coming to the operating room,—after the patient is surgically etherized, incision made, and stomach explored, while the surgeon is working on the viscera there is no pain and the patient may be allowed to become almost conscious, no more ether being necessary until time to close incision, completing the operation with a relatively small amount of anæsthetic.

In most cases that are thoroughly prepared, and especially if there has not been much handling of the viscera in abdominal cases, or prolonged or rough manipulation by the surgeon, reaction after anæsthesia will be short and easy, and the patient will not need any special treatment for nausea, other than keeping quiet.

In a general hospital, where there are many surgeons operating, each having his special methods of preparation, as well as operation, the patience of the anæsthetist may be tried to the extreme. Some surgeons, who may have had some heart-rending experience in resuscitating patients who have been improperly anæsthetized, or perchance may have lost one or two, are apt to be scared all the time for fear the anæsthetist will give too much, are apt to worry her about it. And again, if he should not know a great deal about anæsthetics, he will sometimes tell her how to give it, especially if the patient makes any start to vomit. All this will tend to confuse and worry her, and if she show that she is worried and confused, she will immediately impress the surgeon as not being sure of her ground, and he will lose confidence in her at once. If the surgeon has confidence in his anæsthetist he should let her give the anæsthetic in her own way and not confuse her by talking to her. It is quite different where the anæsthetist has to

work for one or two surgeons only, they soon become accustomed to each other, and there is no confusion or misunderstanding.

It is very necessary for the anæsthetist, as well as for the hospital, to keep a record of the patient's condition before and after the operation, especially the condition of the kidneys, the lungs, heart, and post-operative nausea, as these questions are constantly coming up in statistical reports.

At the largest surgical clinics in this country especially trained anæsthetists are employed, who are nurses. The surgeons recognizing the fact that as they do not aspire to be surgeons, it is not difficult for them to give their whole attention to the anæsthetics, which is certainly enough responsibility for one person to assume. And as one pioneer surgeon in the West put it, "In the next decade, I hope to see anæsthetics administered exclusively by nurses."

WORLD'S LARGEST QUARANTINE STATION

By FELIX J. KOCH

On the Gulf of Suez stands the busy port of Tor, interesting from the fact that here is to be found the largest and best-equipped quarantine station in the world. It has been erected by international co-operation, at great expense, for the benefit of Mohammedan pilgrims returning from the sacred city of Mecca. The whole of the enormous area given over to the station is enclosed by a strong and high wire fence, besides being guarded by hundreds of Turkish soldiers who are quartered here during the time of detention. The large compound contains fumigating establishments, hospitals, storehouses, and hundreds upon hundreds of one-story stone structures arranged in rows and groups. Here the thousands of Mecca pilgrims find lodging; but in cases of serious epidemic, when the houses cannot contain all the pilgrims—tents, which are reserved for this purpose, are pitched. The different parts of the great enclosure are connected by means of a tramway, and communication is further facilitated by telephone. There is also a large telegraph office and water works.

Often from 7,000 to 10,000 of "The Faithful" are seen in detention here. In 1904 there were as many as 17,000 here at one time. As there must elapse ten days without a death before the pilgrims are allowed to proceed on their journey, and there were many deaths among